Claims:

1. A system for automatically warming a grip surface of a vehicle in which the grip surface and rider's hand are exposed to the elements, the system comprising:

(a) an electrical power source;

(b) a resistive heating element mounted to the grip surface for warming the grip surface;

(c) an automatic temperature controller comprising a switching means electrically connected in series between the power source and the heating element for switching power on and off to the heating element in response to a temperature feedback signal; and,

(d) a temperature sensor electrically connected to the temperature controller for providing the temperature feedback signal and mounted on the grip surface at an interface between the grip surface and the hand, the grip surface and the hand being exposed to the elements.

2. The system according to claim 1, wherein the temperature sensor is embedded within the grip surface.

3. The system according to claim 1, wherein the temperature sensor is affixed to a surface of the grip surface.

4. The system according to claim 3, wherein the temperature sensor is affixed to the surface of the grip surface with an elastic band or rubber or thermoplastic tape.

5. The system according to claim 1, wherein the grip surface is a set of handlebars.

6. The system according to claim 5, wherein the set of handlebars comprises a hand grip and the temperature sensor is mounted to the hand grip under the hand.

7. The system according to claim 6, wherein the temperature sensor is embedded within the hand grip.

8. The system according to claim 6, wherein the temperature sensor is affixed to a surface of the hand grip.

9. The system according to claim 1, wherein the vehicle is a snowmobile, a snow thrower, an ATV or a motorcycle.

10. The system according to claim 1, wherein the temperature sensor is a thermistor.

11. A method of controlling a heating element for a grip surface of a vehicle in which the grip surface and a rider's hand are exposed to the elements, the vehicle having an electrical power source for providing power to the heating element, the method comprising:

(a) measuring temperature in an interface between the grip surface and the hand, the grip surface and the hand being exposed to the elements;

(b) comparing the temperature to set temperature; and,

(c) switching on the power to the heating element when the temperature is lower than the set temperature and switching off the power to the heating element when the temperature is higher than the set temperature.

12. The method according to claim 11, wherein the set temperature comprises a first set temperature and a second set temperature, and wherein the power to the heating element is switched on when the temperature is lower than the first set temperature,

and wherein the power to the heating element is switched off when the temperature is higher than the second set temperature.

13. The method according to claim 11, wherein the interface is located under the rider's hand between a hand grip of a set of handlebars of the vehicle and the hand.

14. The method according to claim 12, wherein the interface is located under the rider's hand between a hand grip of a set of handlebars of the vehicle and the hand.

15. The method according to claim 14, further comprising the step of selecting the second set temperature prior to measuring the temperature in the interface.

16. The method according to claim 15, wherein the second set temperature is selected to be in a range from 22°C to 28°C.

17. A system for automatically warming a hand grip of a snowmobile comprising:

(a) an electrical power source;

(b) a heating element mounted to the hand grip;

(c) an automatic temperature controller comprising a switching means electrically connected in series between the power source and the heater coil for switching power on and off to the heater coil in response to a temperature feedback signal; and,

(d) a thermistor electrically connected to the temperature controller for providing the temperature feedback signal, the thermistor mounted on the hand grip at an interface between the hand grip and the hand, the hand grip and the hand being exposed to the elements.

18. The system according to claim 17, wherein the thermistor is located at a front of the hand grip under an operator's fingers.

19. The system according to claim 17, wherein the thermistor is embedded within the hand grip under the hand.

20. The system according to claim 17, wherein the thermistor is affixed to a surface of the hand grip under the hand.

21. The system according to claim 20, wherein the thermistor is affixed to the surface of the hand grip with an elastic band or rubber or thermoplastic tape.

22. The system according to claim 17, wherein the snowmobile has two hand grips and both hand grips have heater coils mounted thereto for warming the hand grips.